AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A delivery system for delivery and deployment of a self expanding stent to a desired vascular location of a patient, the system comprising:

a catheter shaft having a proximal end and a distal end, the distal end of the shaft defining a reception space for receiving a self expanding stent, the stent having a reduced diameter delivery configuration;

an inner core engagable with the proximal end of the stent;

an outer core disposed radially about the inner core and attached to the inner core, the outer core disposed proximal to the proximal end of the stent, wherein a distal end of the outer core is engagable with the stent;

an operator handle~~, having a thumbscrew~~ for movement of the catheter shaft relative to the inner core and the outer core to deploy the self expanding stent;

a stabiliser component;

the inner core and outer core being fixed to the stabiliser component~~, at least during deployment of the self expanding stent~~.

2. (canceled).

3. (currently amended): A delivery system as claimed in claim 1~~2~~ wherein the inner core has a reduced diameter distal portion extending distally of the ~~abutment~~ outer core at least partially through the stent in the reduced diameter delivery configuration of the stent.

4-5. (canceled).

6. (currently amended): A delivery system as claimed in claim 1~~5~~ wherein the inner core is of a composite, or a metallic construction.

7-8. (canceled).

9. (previously presented): A delivery system as claimed in claim 1 wherein the catheter shaft comprises a distal sheath portion and a proximal shaft portion, the diameter of the proximal shaft portion being smaller than the diameter of the distal sheath portion.

10. (original): A delivery system as claimed in claim 9 wherein the stabiliser component is disposed over the smaller diameter proximal shaft.

11. (original): A delivery system as claimed in claim 10 wherein the stabiliser comprises a tube and the diameter of the stabiliser tube is not greater than the diameter of the distal sheath of the catheter shaft.

12. (previously presented): A delivery system as claimed in claim 9 wherein the catheter shaft has a guidewire exit port which is located proximally of the distal end of the catheter shaft.

13. (original): A delivery system as claimed in claim 12 wherein the guidewire exit port is located proximally of the stent.

14. (previously presented): A delivery system as claimed in claim 12 wherein the guidewire exit port is located proximally of the distal sheath.

15. (previously presented): A delivery system as claimed in claim 12 wherein the guidewire exit port is located at a transition between the distal sheath and the reduced diameter proximal shaft portion.

16. (previously presented): A delivery system as claimed in claim 12 wherein the guidewire exit port is located distally of the stabiliser component.

17. (previously presented): A delivery system as claimed in claim 12 wherein the guidewire exit port is configured to exit along an axis that is substantially parallel to a longitudinal axis of the distal sheath.

18-19. (canceled).

20 (currently amended): A delivery system as claimed in claim 1~~2~~ wherein the inner core comprises a large diameter distal segment, a reduced diameter proximal segment , and a transition segment between the distal and proximal segments.

21. (original): A delivery system as claimed in claim 20 wherein the transition segment is proximal of the abutment region.

22 (previously presented): A delivery system as claimed in claim 20 wherein the transition segment is distal of a guidewire exit port.

23. (canceled).

24. (currently amended): A delivery system as claimed in claim ~~23~~ 1 wherein the distal end of the shaft~~sheath~~ is a composite with a low friction inner surface.

25. (currently amended): A delivery system as claimed in claim 1~~24~~ wherein the distal end of the shaft~~sheath~~ is reinforced to withstand the radial stresses of the stent in its constrained reduced diameter configuration.

26-35. (canceled).

36. (previously presented): A system as claimed in claim 1 wherein the system comprises a procedural guidewire and the guidewire is fixed or fixable to the stabiliser component.

37. (previously presented): A system as claimed in claim 1 wherein the stabiliser component is length adjustable.

38. (previously presented): A system as claimed in claim 1 wherein the stabiliser component comprises at least two parts which are movable relative to one another.

39. (currently amended): A system as claimed in claim 38~~1~~ wherein at least one of the stabiliser components position is adjustable.

40. (original): A system as claimed in claim 39 wherein the stabiliser component is adjusted by rotation of a threaded element which provides a position control device.

41-50. (canceled).

51. (canceled).

52. (original): A system as claimed in claim 1 wherein the system includes a guidewire and the guidewire extends at least the length of the catheter shaft.

53. (original): A system as claimed in claim 52 wherein the inner core defines a guidewire lumen along the length thereof.

54. (previously presented): A system as claimed in claim 52 wherein the system includes a lock for the guidewire.

55. (original): A system as claimed in claim 54 wherein the lock is located proximal of the handle.

56. (original) A system as claimed in claim 1 wherein the stabiliser component comprises a tubular element and the tubular element has a tapered distal end.

57. (canceled).

58. (original) A system as claimed in claim 1 wherein the stabiliser component has a proximal opening to allow backflow of blood.

59. (original): A system as claimed in claim 1 wherein the stabiliser component extends substantially the length of the catheter shaft.

60-61. (canceled).

62. (canceled).

63-68. (canceled).

69. (withdrawn): A method for delivery and deployment of a self expanding stent comprising the steps of:

providing a delivery system comprising a catheter shaft having a proximal end and a distal end, the distal end of the shaft defining an outer sheath having a reception space for receiving a self expanding stent, the stent having a reduced diameter delivery configuration;

an inner core engaging the proximal end of the stent;

an operator handle for movement of the catheter shaft relative to the inner core to deploy the self expanding stent;

introducing the delivery system into a vasculature of a patient;

delivering the stent delivery catheter to a region of interest;

fixing the inner core relative to the stabiliser component; and

deploying the self expanding stent by engaging the inner core with the proximal end of the stent.

70. (withdrawn): A method as claimed in claim 69 wherein the stent is deployed by sliding the outer sheath and stent proximally to engage the inner core with the proximal end of the stent, the inner core engagement frictionally decoupling the stent and the sheath to deploy the stent.

71. (withdrawn): A method as claimed in claim 69 wherein the stent is frictionally coupled to the outer sheath in the delivery configuration.

72. (withdrawn): A method as claimed in claim 69 comprising:

introducing a procedural guidewire into the vasculature;

advancing the guidewire to a region of interest; and

advancing the delivery system over the procedural guidewire.

73. (withdrawn): A method as claimed in claim 72 wherein the method is of the rapid exchange type.

74. (withdrawn): A method as claimed in claim 69 comprising the steps of:

providing an embolic protection filter; and

deploying the filter distal of the region of interest, in advance of introduction of the delivery system.

75. (withdrawn): A method as claimed in claim 74 wherein the filter is mounted on the guidewire.

76. (withdrawn): A method as claimed in claim 74 wherein the filter is mountable to the guidewire.

77. (withdrawn): A method as claimed in claim 69 wherein the region of interest is a region of stenosis in an arterial vessel having a tortuous passageway leading thereto.

78. (withdrawn): A method as claimed in claim 77 wherein the arterial vessel is a carotid artery.

79. (withdrawn): A method as claimed in claim 77 wherein the arterial vessel is a superficial femoral artery.

80. (withdrawn): A method as claimed in claimed 77 wherein the arterial vessel is a renal artery.

81. (withdrawn): A method as claimed in claim 69 wherein the inner core is fixed relative to a component of the system.

82. (withdrawn): A method as claimed in claim 75 wherein the component is a guide catheter.

83. (withdrawn): A method as claimed in claim 75 wherein the component is a Touhy Borst.

84. (withdrawn): A method as claimed in claim 69 wherein the system comprises a stabiliser fixed at a proximal end to the handle and the method comprises fixing the stabiliser to a component of the system.

85. (withdrawn l): A method as claimed in claim 78 wherein the method comprises fixing the distal end of the stabiliser to a guide catheter.

86. (withdrawn): A method as claimed in claim 78 wherein the method comprises fixing the distal end of the stabiliser to a Touhy Borst.

87. (withdrawn): A method for delivery and deployment of a self expanding stent comprising the steps of:

providing a delivery system providing:

a catheter shaft having a proximal end and a distal end, the distal end of the shaft defining a reception space for receiving a self expanding stent, the stent having a reduced diameter delivery configuration;

an inner core engagable with the proximal end of the stent;

an external mounting for the inner core; and

an operator actuating element for the catheter shaft; and

moving the operating actuating element proximally of the external mounting to move the catheter shaft relative to the inner core to deploy the stent.

88. (withdrawn): A method as claimed in claim 87 wherein the operator handle is a pull handle and the catheter shaft is pulled proximally of the inner core to deploy the stent.